



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,239	06/21/2000	Norman D. Geddes	ASI0001-US	7455
27510	7590	08/21/2006	EXAMINER	
KILPATRICK STOCKTON LLP 607 14TH STREET, N.W. WASHINGTON, DC 20005			MEINECKE DIAZ, SUSANNA M	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/598,239

Applicant(s)

GEDDES ET AL.

Examiner

Susanna M. Diaz

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 2,9-15,20,21,25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,16-19 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This final Office action is responsive to Applicant's response filed July 7, 2006.

No amendments have been made.

Non-elected claims 2, 9-15, 20, 21, 25, and 26 stand as withdrawn.

Claims 1, 3-8, 16-19, and 22-24 are presented for examination.

Response to Arguments

2. Applicant's arguments filed July 7, 2006 have been fully considered but they are not persuasive.

Applicant argues that the utility of the invention does not have to be expressly recited in the claims in order to be statutory under § 101 (pages 7-9 of Applicant's response). Under the statutory requirement of 35 U.S.C. § 101, a claimed invention must produce a useful, concrete, and tangible result. For a claim to be useful, it must yield a result that is specific, substantial, and credible (MPEP § 2107). A concrete result is one that is substantially repeatable, i.e., it produces substantially the same result over and over again (*In re Swartz*, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)). In order to be tangible, a claimed invention must set forth a practical application that generates a real-world result, i.e., the claim must be more than a mere abstraction (*Benson*, 409 U.S. at 71-72, 175 USPQ at 676-77). Additionally, a claim may not preempt abstract ideas, laws of nature or natural phenomena nor may a claim preempt every "substantial practical application" of an abstract idea, law of nature or natural phenomena because it would in practical effect be a patent on the judicial exceptions

Art Unit: 3623

themselves (*Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972)). (Please refer to the “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” for further explanation of the statutory requirement of 35 U.S.C. § 101.) The claim language has to give enough guidance to convince one of ordinary skill in the art that the claimed invention yields a result that is specific, substantial, and credible. Claims 23-24 merely collect, distribute, and display data without any guidance as to how such data is useful, i.e., the collection, distribution, and display of the broadly recited data fails to yield a specific result; therefore, claims 23-24 are non-statutory.

Regarding the rejection of claims 1 and 17 under § 102 over Weld, Applicant argues that “Weld does not disclose the use of at least the ‘graphical user interface system.’ Further, Weld does not disclose the use of any specific system functioning to interface between the user and the business processes.” (Pages 9-10 and 12 of Applicant’s response) The Examiner respectfully disagrees. Weld talks about implementing the disclosed theory in the field of AI planning and Weld mentions the use of compilers, agents, and planners (see page 1, for example), which implies that Weld’s disclosed planning algorithms are implemented using AI-based software programs (e.g., using compilers, agents, and planners). In order to implement artificial intelligence programs (e.g., via compilers, agents, and planners), a programmer must have access to a graphical user interface system to enter information related to the business processes analyzed as part of the respective artificial intelligence program.

Regarding the rejection of claim 17 under § 102 over Weld, Applicant argues that “while much of the focus is directed toward the use of AI for determining the necessary

steps to achieving a *user defined* goal, Weld does not disclose the act of *determining* a goal.” (Pages 10-11 of Applicant’s response) The Examiner respectfully disagrees. It should be noted that claim 17 does not specify who or what performs the step of “determining a goal for a supply chain participant.” Weld states, “The field of AI planning seeks to build control algorithms that enable an agent to synthesize a course of action that will achieve its goals.” (Page 1) In order to plan an appropriate course of action, desired goals must be specified. In other words, whoever or whatever performs the planning of the appropriate course of action must have some input of a desired goal for the supply chain participant. Receiving and/or recognizing such input is an example of determining a goal for a supply chain participant.

Regarding the rejection of claims 1 and 23 under § 102 over Hess, Applicant argues that Hess does not disclose “a graphical user interface system that displays information regarding the one or more business processes.” (Pages 12-13 of Applicant’s response) The Examiner respectfully disagrees. Hess’ article is titled “Using Autonomous Software Agents to Create Next Generation of Decision Support Systems.” Hess’ article is directed toward such an implementation of decision support software. In order to program such a system with software agents, a programmer must have access to a graphical user interface system to enter information related to the business processes analyzed as part of the respective artificial intelligence program. For example, page 10 of Hess discusses use of Microsoft Excel’s™ Solver and Visual Basic, both of which display information to a user via graphical user interfaces.

Regarding the rejection of claim 17 under § 102 over Hess, Applicant argues that "Hess fails to disclose 'determining a goal for a supply chain participant.'" (Page 13 of Applicant's response) The Examiner respectfully disagrees. It should be noted that claim 17 does not specify who or what performs the step of "determining a goal for a supply chain participant." Hess discusses how the software agents must be programmed with a supply chain participant's goal (pages 5-6); therefore, each agent determines a goal for the supply chain participant in order to work toward the goal and be able to identify when the goal has been achieved.

Regarding the rejection of claim 22 under § 103 over Weld, Applicant argues that Examiner's use of Official Notice is improper. Applicant also states, "Given that it is not appropriate to take official notice in this case, the undersigned is not required to traverse improperly taken notice. To require traverse in such a case would amount to improper burden shifting where no *prima facie* case of unpatentability has been stated." (Pages 13-15 of Applicant's response) Applicant makes a similar argument regarding the rejection of claim 22 under § 103 over Hess (page 15 of Applicant's response).

Examiner notes the following discussion of Official Notice taken from the MPEP:

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241 ("[I]n the absence of any demand by appellant for the examiner to produce authority for his statement, we will not consider this contention."). A general allegation that the claims define a patentable invention without any reference to the examiner's assertion of official notice would be inadequate. If applicant adequately traverses the examiner's assertion of official notice, the

examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (“[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings” to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). If applicant does not traverse the examiner’s assertion of official notice or applicant’s traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner’s assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate. (MPEP § 2144.03(C))

Applicant has not “specifically point[ed] out the supposed errors in the examiner’s action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art,” which is required by MPEP § 2144.03(C).

Therefore, Applicant’s broad request for references to support Examiner’s statements of Official Notice amounts to nothing more than an unsupported challenge. Consequently, the statements of Official Notice made in the art rejection (i.e., Official Notice is taken that the use of concept graphs to perform business analysis is old and well-known in the art of business management) have been established as admitted prior art due to Applicant’s failure to adequately traverse the Examiner’s assertions of Official Notice.

Regarding the double patenting rejection, Applicant’s argument that “a *prima facie* case has not been established since there is no teaching provided for the presently recited limitations” (page 16 of Applicant’s response) is not understood since,

Art Unit: 3623

as explained in the rejection, the claim limitations in the instant application are fully anticipated by the language of the claims in the '191 patent. Applicant fails to point out which limitations are allegedly not taught; therefore, Applicant's argument is not persuasive.

In conclusion, Applicant's arguments are not persuasive and the rejections are maintained.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 23 and 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 23 and 24 fail to expressly recite a practical application; therefore, the usefulness of the invention is unclear. Information is merely collected, distributed, and displayed; however, there is no express recitation of a useful application of this data. For example, claim 1 recites that similar data is used to determine a plan for achieving at least one or more goals, which is deemed to be useful.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1, 16-19, and 23 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Weld ("Recent Advances in AI Planning").

7. Claims 1, 17, 18, and 23 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Hess ("Using Autonomous Software Agents to Create Next Generation of Decision Support Systems").

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weld ("Recent Advances in AI Planning"), as applied to claim 17 above.

Weld does not expressly teach that the knowledge base includes one or more concept graphs; however, Official Notice is taken that the use of concept graphs to perform business analysis is old and well-known in the art of business management. They facilitate more efficient assessment of knowledge in relation to various concepts. Since Weld is directed toward decision-making based on information gleaned from a knowledge base, the Examiner submits that it would have been obvious to one of

ordinary skill in the art at the time of Applicant's invention to modify Weld to utilize concept graphs to help create a plan for meeting a determined goal in order to facilitate more efficient assessment of available knowledge in relation to the determined goal.

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hess ("Using Autonomous Software Agents to Create Next Generation of Decision Support Systems"), as applied to claim 17 above.

Hess does not expressly teach that the knowledge base includes one or more concept graphs; however, Official Notice is taken that the use of concept graphs to perform business analysis is old and well-known in the art of business management. They facilitate more efficient assessment of knowledge in relation to various concepts. Since Hess is directed toward decision-making based on information gleaned from a knowledge base, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Hess to utilize concept graphs to help create a plan for meeting a determined goal in order to facilitate more efficient assessment of available knowledge in relation to the determined goal.

Allowable Subject Matter

11. Claims 3-8 and 24 would be allowable if rewritten to overcome the Double Patenting rejection and § 101 rejection (of claim 24), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1, 3-8, 16-19, and 22-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,892,192. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 3-8, 16-19, and 22-24 in the instant application are fully anticipated by the language recited in claims 1-10 of U.S. Patent No. 6,892,192. Elimination of an element or its functions is deemed to be obvious over prior art teachings that are all-inclusive of recited claim elements. See *In re Karlson*, 136 USPQ 184, 186; 311 F.2d 581 (CCPA 1963).

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 10 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Susanna M. Diaz
Primary Examiner
Art Unit 3623

August 5, 2006